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Rev. Dr. Bloss
with the Author's respect.

TUBUS ASTRONOMICUS

CARMEN LATINUM

IN THEATRO SHELDONIANO RECITATUM

DIE JULII V. MDCCCXLVIII

OXONII
FRANCISCUS MACPHERSON
MDCCCXLVIII.

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CARMEN LATINUM

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DIE JULII V MDCCC XLVIII

OXONII
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M DCCC XLVIII.

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OXONII:

EXCUDEBAT I. SHRIMPTON.

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TUBUS ASTRONOMICUS.

ÆMULA sublustres paulatim abscondere campos
Nox parat, incertam fundens circum omnia nubem;
Pòst,—ubi submotæ non amplius ulla diei
Signa polum variant, neque vix delapsus inaurat
Sol roseos ardens supremo lumine colles,
Nec croceâ cœli pingit confinia flammâ—
Hesperus en! radians notos ostendit honores
Primus, et hinc illinc per cærula lata profundi
Induit in gemmas sese sensim arduus æther,
Et liquidum tremulo scintillat lumine templum!
Quis credat pulcri miracula tanta decoris
Condita fulgenti Solis latuisse sub auro?
Pandit enim, tectos dudum, pellucidus aer
Undique thesauros! celsi diducta patescunt
Mœnia convexi: tum mens inhiantibus ardet
Ignotos penetrasse orbes, terrâque relictâ
Ad noctis tacitas velox evadere tædas!
Et poterit: trabibus si navita transvolat æquor
Quid vetat ingenio tenues perlabier auras?

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Carpentem flores rerum per prata novarum,
Numine quos blando nutrivit serior ætas,
Gratia sectetur:—mirum, en! penetralia mundi
Sunt reserata oculis, datur abdita visere regna,
Tempore quo—vos quantus honor, quæ cingere debet
Gloria, qui tanto ditastis munere sœcla!—
Vis magica aptati vitro lucente canalis
Millia defessum fallentia sidera visum
Explicuit, tractusque docet transnare latentes,
Atque infinitos stellarum evolvere cœtus!
Terra vagam structis quæ molibus Amphitriten[1]
Distinet, et vetitis jussit concedere ab oris,
Terra Batavorum, sic fama, excuderat olim
Scintillam in tantas rapiendam tempore flammas.
Parca fides facto: dubia in primordia rerum
Tendimus ambiguæ per sera crepuscula lucis.
Ludebant fratres vacuâ pueriliter horâ
In thalamo assiduæ genitor quà deditus arti
Pensa exercebat: tenuem non ulla supellex[2]
Ornabat pretiosa domum; fabrilia tantùm

[1] In reference to the method adopted in Holland to prevent the encroachments of the sea. The place where the discovery referred to occurred was the town of Middleburgh.

[2] "Borelli informs us that the children of Zachariah Jansen, a spectacle maker of Middleburgh, amusing themselves in their father's shop, placed by chance a convex and a concave lens in such a manner that on looking through them at the weather-cock of the church it seemed to them nearer and much larger than usual." *Encycl. Metropol.*, vol. iii. p. 400. b.

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Arma casam circum, studiorum insignia, pendent.
Cura patri fuerat quæ sit præstantia vitro
Quærere, lucentesque illinc effingere circlos ;
Atque ita convexam dantes utrimque figuram
Illic cernere erat, senio genus utile, lamnas ;
Et quoniam est oculis vitium non omnibus unum,
Dant aliæ inflexam bino curvamine formam.
Quas ubi contrectant fratres, versantque vicissim
Ante oculos nunc has nunc illas, forte duabus
Appositis unà diverso corpore lamnis,
Hâc oculo propius, sed paulum longius illâ,
Singula quæque notant per apertæ claustra fenestræ.
Protinus insueto mirantur numine monstrum,
Longinquas oculis propius concedere turres !
Longinquas mirantur et ipsâ in nube volucres.
Vix tenui pridem signantes æthera puncto,
Assiduos celerum pennarum ostendere motus,
Et picturatos coram proferre colores !
Scilicet admotis cæco tentamine circlis
Vis ingens inerat : duplicisque potentia vitri
Quippe vagæ radios lucis, quos omnia porro
Undique profundunt splendenti sole recussa,
Excipit, et sparsos flectens committit in unum,
Quo tenues aditus oculorum attingere possint.
Hic fons : hâc artes crevere ab origine tantæ :
Sic nova trans celsas monstratur semita nubes :
Ac veluti lentum pepulit cùm marmor aquarum
Pendenti de rupe cadens lapis : ilicet undæ

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Innumeris petiere sonantia littora gyris.
Nuncia non aliter miracli fama reperti[3]
Permeat Europamque, Italasque allabitur oras.—
Nec fuit incassum : vos conscia flumina molli
Murmure Pisanam[4] præterlabentia turrim ;
Tuque etiam clivus formosior[5], unde patentes
Tendere se valles apparent, arvaque fetu
Pinguia lactenti, collucentesque sub auras
Surgere purpurei liquidum caput Apennini.
Huc alacres etenim gressus persæpe tulisti,
Occiduo dubias tingenti sole tenebras,
Tuscorum, Galilæe, decus ! sed non tua pulcram
Mens faciem repetit camporum, grandia pectus
Corripiunt : aciem superas contendere ad oras
Est amor, ardentesque astrorum inhiare catervas !
Quin moderans dextrâ per sudum flectere cœpit
Exiguum, at mundi reseret qui claustra, cylindrum.

[3] "It was about the year 1590. No sooner was this interesting discovery known, as it speedily was over the principal part of the continent of Europe, than Galileo, Kepler, and Descartes bent the whole force of their genius to the improvement and employment of so useful an apparatus." *Encycl. Met.*, vol. iii. p. 400.

[4] Galileo Galilei was born at Pisa in the year 1564.

[5] Fésolé.—See Milton's Par. Lost, i. 288 :—

— the moon, whose orb
Thro' optic glass the Tuscan artist views
At Evening, from the top of Fésolé
Or in Valdarno, to descry new lands,
Rivers or mountains on her spotty globe.

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Plumbea massa cavum dederat terebrata canalem[6],
Claudebat geminum crystallina lamna foramen.
Hanc etenim invento dedit experientia formam,
Hôc vitreos orbes sejunxerat intervallo,
Quo radios, primæ flexos curvamine lamnæ,
Altera declinans immittat flumine recto.
Hoc fuit auxilium; sic ultima quærere cœli
Ausus, et allabens propius rimarier astra:
Sic Triviæ crescentem audax circumspicit arcum;
Sic avet invictos Jovis indagare nitores.
Actutum gelidæ facies argentea Lunæ
Vertere, et ille color, puro loca lumine lustrans,
Conspersus primum maculis, præpandere sensim
Non ita dissimilem nostris regionibus orbem.
Quinetiam miranda, Jovis dum suspicit ignes,
Est species oblata: chori cinxere Tonantem[7],

[6] "He (Galileo) placed at each end of a leaden tube a spectacle glass, both of which were plane on one side, while one of them had its other side convex, and the other its second side concave, and having applied his eye to the concave glass, he saw objects pretty large and pretty near him." *Brewster's Martyrs of Science*, 1846. p. 19.

[7] "He clearly established that the four new stars were satellites, or moons, which revolved round Jupiter in the same manner as the moon revolves round our globe. The system of Jupiter illuminated by four moons performing their revolutions in different and regular periods, exhibited to the proud reason of man the comparative insignificance of the globe he inhabits, and proclaimed in impressive language that that globe was not the centre of the universe." *Brewster*, p. 28.

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Lucentes choreæ; concentu sidera miro
Quattuor, ardentis domini sectantia cursum,
Funduntur circum, gyrisque sequacibus urgent.
Nec minus et magicum vertat quocunque foramen,
Clarius apparet naturæ lucidus ordo,
Latius et cœpit se pandere machina mundi:
Multa latent—seros poscit, Galilæe, minores
Ille labor, longoque aliam post tempore gentem.
Sit lugere super fractæ perjuria mentis
Victricesque minas! dat inani cæca timore
Relligio insontem vinclis, et carcere pensat
Addita labentes patriæ decora alta per annos.
Ille annis gravior, tardæque in limine mortis,
Sursum oculos, heu! vitali jam luce carentes
Flectit inops, secum et spe serâ præcipit horam,
Justior indignam cum labem exemerit ætas.
Acceleremus iter: longi pars maxima cursûs
Restat adhuc; spatio quanquam concludimur arcto,
Nec brevior sinit hora omnes percurrere fastos.
An memorem cui visa cavo se cingere circlo[8]
Pulcrior effigies Saturni; credita dudum
Sideribus triplicem ternis præbere figuram[9].
Acceptam sed enim tentando protulit artem
Iste, nec hâc rerum specie captatur inani:

[8] Huygens it was who discovered the actual conformation of Saturn.—See Humboldt's Kosmos, ii. 319.

[9] "Galileo remarked that Saturn was not a single star, but three together, nearly touching one another." *Brewster*, p. 35.

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Inque rotam medius lucentem cernitur, ecce[10]!
Projicere assiduas orbis Saturnius umbras.
Tu quoque debueras nostrâ, Newtone, camœnâ
Dicier, explorare novos cui contigit usus,
Et meliorem inferre modum, quo lumine puro[11]
Conspicientum oculos distincta lacessat imago.
Quod necdum fiebat enim, cùm pervia vitri
Lamina dirigeret lucis penetrabile flumen.
Nam radios Titan quos mittit cunque renidens
Constare e septem vario splendore colorum
Tu primus docuisti, immistosque ordine miro
Glaucumque, croceumque unà, roseosque rubores
Mirandis pallere modis, et numine juncto
Efficere albescentem aurai simplicis ignem.
Hanc igitur lucem, formatamque his elementis,
Frangere amat, leviterque resolvens spargere vitrum,
Ut rursum in proprios abeat mutata colores.
Unde etiam quæcunque interveniens crystallum
Fingat in arcanis oculi simulacra latebris
Cernuntur vario tanquam circumdata limbo.
Haud aliter quondam cùm detonuere procellæ,
Atque eluctatur Phœbi jubar, humidus aer

[10] Cf. Tennyson's Poems, ii. 137:—

"Still as while Saturn whirls, his stedfast shade
Sleeps on his luminous ring."

[11] Newton invented his reflecting telescope to avoid an inconvenience, technically called chromatic aberration, which attended the use of glass lenses.

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Mille coloratos adverso sole decores
Induit, et zonâ rorantia nubila cingit.
Quocirca, Newtone, novum conamen inibas,
Proque nimis dubio crystalli duplicis usu,
In speculi effigiem subigebas læve metallum,
Planitiem duram sinuans curvamine leni.
Scilicet ut patulum lux didita verberet æquor,
Verberet—atque iterum manans offensa retrorsùm,
In speciem cunei radiorum colligat agmen.
Tum speculi latus alterius vi continuatâ
Transversum feriens, ad lævum flexa resultet,
Inque oculos jaciat simulacra haud irrita rerum.
Nec malè, quo turmis lucentum cœlicolarum
In speculi facie sua responderet imago:
Sic lacus arboreas reddit pellucidus umbras,
Atque herbas riparum, et mollia vellera nubis.
Tale rudimentum: rem cœptam ferre colendo
In melius, tantæque sequi vestigia mentis
Est data sors aliis, quorum comprendere laudes
Jam vetor, et plenos circumvectarier annos.

Te quoque, ni dignæ moneat reverentia famæ,
Carmine te tacuissem: o felix! non quia, princeps
Illius ambiguos stellæ didicisse meatus[12],
Quæ comitem extremam se Phœbo præbet eunti,
Diceris octavam citharæ cœli addere chordam[13]:

[12] In allusion to the discovery by Herschel of the Georgium Sidus, and his thus adding an eighth planet to our solar system.

[13] "Or yield the lyre of Heaven another string." *Campbell.*

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Sed quia fœminei[14] grato solamine amoris
Tu ditatus eras; quia, quàm lætabile donum,
Unanimam es nactus cognatâ mente sororem,
Quæque vias instaret easdem, atque omine multo
Fallere longinquæ calleret tædia noctis.
Mens avet enarrare tuo quæ monstra cylindro
Se retegant: quot mille astrorum consita gemmis[15]
Lactea lucescat Via: qui sit in Orione
Fulgor: inardescat quo fulmine Perseos ensis.
Aspice! quà, modico radios cogente metallo,
Exiguum niteat nebuloso corpore lumen:
Adde novas vires, rursumque in luce malignâ
Grana micant auri flavas imitantia arenas:
Adde alias, mox illa prius tenuissima moles
Antea inauditum jubar explicat; astra minuto
Mille loco incipiunt denseri, omnesque micando
Vincere quos jactat cœlum hoc quodcunque nitores!
Avolet hinc posito mens corpore, præpete pennâ[16]

[14] Herschel's sister, his constant companion and able assistant in all his astronomical labours, died at the beginning of this year, 1848.

[15] In the direction of the Milky Way, Herschel's telescope was often directed. Orion's nebula, too, and the sword-handle of Perseus, were frequent objects of his searching gaze.—See Nichol, p. 186.

[16] Could we transport ourselves to one of those nebulæ, the several stages of whose resolution by Sir William Herschel's telescope I have just been describing, and from thence look back on the regions we have left, this whole galaxy of ours, all the stars that we now behold with the naked eye, would appear

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Congeriem petat, extremo quam in fine latentem
Vis speculi patefecit, et inde relicta locorum
Pleïadas, solemque, et si quæ lucida nôrunt
Sidera pastores tardæ solatia noctis,
Luminibus versis respectet—at illa coire
Densa magis magis usque unà, nihil est nisi lucis
Exiguæ candor magnum variantis inane!
Omne adeo templum hoc, quod et aspicientibus olim
Machina totius mundi fuit; omne profundum,
Lactea quod claudit data circum semita solem,
Insula ceu, medio in ponto, sine fine patentem
Æthera distinguit, tanta et miracula rerum
Inter, parva jacet, totque his licet ardeat astris,
Vix spatium lati vastum notat infiniti.

Has vigil in formas, vehementi incensus amore,
Sæpe oculos, tanquam e speculâ, vir maxime dudum
Tendis inexpletos: his et tua clara propago[17],
Ille patrem referens virtute, innubila pingi
Convexa Afrorum miratur: et ille, recentem
Quem tulit haud atavis indignum tristis Ierne[18],

in the vast distance but as one small spot. For what of old men thought the universe, we now find to be but one of many islets studding the surface of the infinite sea. Such is the grander notion of the Creator's power, which Herschel's mirror has enabled us to form.

[17] Sir John Herschel, (son of Sir William,) whose late discoveries made at the Cape have added greatly to the lustre of the name.

[18] Lord Rosse.

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Hæc modo si penetrasse queat portenta, cylindrum,
Coniferas æquantem immani corpore pinos,
Dirigit astra super, notosque supervolat orbes,
Atque refert tendentem ultrà sine limite mundum.
O nimium felix! cujus, sub nocte serenâ
Omnia cum latè siluere, nec ulla volantum
Vox, neque balantum tacitis immurmurat agris,
Vivida vis animi, curarum tenuia linquens,
Dædala cærulei percurrit templa profundi.
Nam neque tum se figit humi, totque aere vasto
Prospiciens moles duce tanto numine callem
Circuitu miro carpentes, protinus Ipsum
Sentit adesse Deum manifestius, altaque fervet
Nescio quâ dulcedine corda, ardetque supremi
Artificis cæcam quærendo ediscere mentem.
Quam temerè! ast illi juga celsa recedere montis
Longius, et densâ convolvi nube cacumen.
Nam veluti jactos fluctu exundante lapillos[19]
Littora per variata puer petit, atque repertis
Gaudet; at hunc latuere Thetis quæcunque sub undâ
Celat, et immensi miracla recondita ponti:

[19] "I know not," remarked Newton a short time before his death, "what I may appear to the world, but to myself I seem to have been only like a boy playing on the sea-shore, and diverting myself in now and then finding a smoother shell than ordinary, whilst the great ocean of Truth lay all undiscovered before me." *Turner's Collections relative to the town of Grantham.*

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Sic animos offusa tenet nox—O ubi tempus,
O ubi, cùm spissæ penetret caliginis umbras
Mens levis, atque citâ volet alâ, omnemque pererrans
Æthera, quæ præcepta chori miranda facessant
Noctivagi lustret, queat et jam elatior, harum,
Quascunque Omnipotens fieri decreverit Auctor,
Multiplicem rerum cognoscere simplicitatem.

R. F. HESSEY,

E COLL. MAGD.

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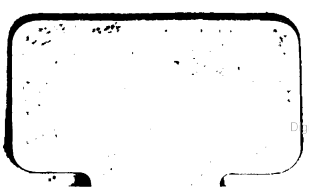
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